## **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-012159 Address: 333 Burma Road **Date Inspected:** 26-Jan-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes No Li Yang **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** Orthotropic Box Girder (OBG)

## **Summary of Items Observed:**

On this date Caltrans Office of Structural Material (OSM) Quality Assurance (QA) Inspector, D.Sukanthan was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

#### OBG # CROSS BEAM CB04

This QA observed ZPMC qualified welding personnel identified as 066179 perform Shielded Metal Arc Weld (SMAW) Process repair welding on weld joint CB202A-004-004. ZPMC Quality Control Personnel (QC) identified as Mr. Zhang Xiaoming was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-SMAW-2G (2F)-FCM-Repair and approved Critical Weld Repair (CWR) B-CWR 1090.

This QA observed ZPMC qualified welding personnel identified as 066179 perform Shielded Metal Arc Weld (SMAW) Process repair welding on weld joint CB202A-004-018. ZPMC Quality Control Personnel (QC) identified as Mr. Zhang Xiaoming was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-SMAW-4G (4F)-FCM-Repair and approved Critical Weld Repair (CWR) B-CWR 1090.

This QA inspector performed random Visual Inspection (VT) of Cross beam CB4 hold back Welds. North side of bottom panel, Side panel and deck panel and intermediate Web panel hold back welds appear to be in general

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compliance with the contract documents.

#### **OBG # CROSS BEAM CB05**

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

## **OBG # CROSS BEAM CB06**

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

#### OBG # CROSS BEAM CB07

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

#### **OBG # CROSS BEAM CB08**

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

#### **OBG # CROSS BEAM CB09**

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

#### **OBG # CROSS BEAM CB10**

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

## OBG # CROSS BEAM CB 11

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

#### OBG # CROSS BEAM CB12

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

#### **OBG # CROSS BEAM CB13**

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This QA observed ZPMC qualified welding personnel identified as 040656 perform Shielded Metal Arc Weld (SMAW) Process repair welding on weld joint CB202G-040-019. ZPMC Quality Control Personnel (QC) identified as Mr. Zhang Qiao was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-SMAW-3G (3F)-Repair.

This QA observed ZPMC qualified welding personnel identified as 040656 perform Shielded Metal Arc Weld (SMAW) Process repair welding on weld joint CB202G-039-039,019,083. ZPMC Quality Control Personnel (QC) identified as Mr. Zhang Qiao was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-SMAW-3G (3F)-Repair / WPS-345-SMAW-2G (2F)-Repair.

## **OBG # CROSS BEAM CB14**

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

#### **OBG # CROSS BEAM CB15**

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

#### **OBG # CROSS BEAM CB16**

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

#### OBG # CROSS BEAM CB17

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

## **Summary of Conversations:**

As mention above

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-00422372, who represents the Office of Structural Materials for your project.

**Inspected By:** Sukanthan, Dhanasingh Quality Assurance Inspector

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**Reviewed By:** Hall,Steven QA Reviewer